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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,626	11/21/2003	Claude Dubief	232989US	8626
22850 7590 01/11/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER WILLIAMS, LEONARD M	
			ART UNIT 1617	PAPER NUMBER
			NOTIFICATION DATE 01/11/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

Application No.

10/717,626

Applicant(s)

DUBIEF ET AL.

Examiner

Leonard M. Williams

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 28-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Detailed Action

***Election/Restrictions***

Applicant's election with traverse of Group I (claims 1-27) in the reply filed on 05/11/2007 is acknowledged. The traversal is on the ground(s) that there is no search burden on the examiner. This is not found persuasive because the examiner has set forth the reasoning behind the election restriction and why it would be a burden to search all the inventions in the claims. The simple assertion that it would not be a burden with no clear arguments to support such is not sufficient to withdrawal the election requirement.

The requirement is still deemed proper and is therefore made FINAL.

***Status of Claims***

Claims 1-27 are currently pending. Claims 28-42 are withdrawn as being drawn to non-elected subject matter.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalrymple et al. (WO 01/56537).

Dalrymple et al. teach, in the abstract, a microemulsion for use in personnel care products, home care products and fabric care which is clear and has particle sizes that are less than the wavelength of light, said microemulsion comprising a) a substantially water insoluble quaternary ammonium salt containing at least one long-chain aliphatic hydrocarbon group; b) an oil or hydrophobic organic compound and c) a dispersant;

wherein the weight ratio of component (a) to component (b) to component (c) is from 2:0.5:0.4 to about 0.5:2:0.8. Methods of making such microemulsions are also included.

On page 5, Dalrymple et al. teach that microemulsions of the invention are clear and have an average particle size that are less than the wavelength of light (average of 100nm or less).

Dalrymple et al. teaches on pages 10-14:

*"Illustrative examples of quaternary compounds that satisfy the above formulas and which are substantially water insoluble include, but are not limited to: dicetyldimonium chloride, dicetyldimonium bromide, dicetyldimonium tosylate, stearyl dimethyl benzyl ammonium chloride, palmitamidopropyltrimonium chloride, behenamidopropyl trimonium chloride, palmitamidopropyltrimonium bromide, cocamidopropyl ammonium chloride, dibehenyldimonium chloride, stearylamidopropyltrimonium methosulfate, tallowamidotrimonium chloride, soyamidopropyltrimonium chloride and canolamidopropyltrimonium methosulfate.*

*Of these substantially water insoluble quaternary ammonium salts, dicetyldimonium chloride (VARISOFT.RTM. 432 PPG), dibehenyldimonium chloride and palmitamidopropyltrimonium chloride (VARISOFT.RTM. PATC) are highly preferred in the present invention.*

*The oil or hydrophobic organic component employed in the present invention*

*is any oil or fatty organic compound which is not water dispersible on its own.*

*Such compounds are well known to those skilled in the art and may be selected from the group of fatty esters made from a C.sub.8-24 acid and a C.sub.1-8 alcohol, dialkyl esters, propoxylated alcohols, propoxylated fatty acids, mineral oils, mineral seal oils, silicon oils, petrolatums, aliphatic hydrocarbons, paraffinic hydrocarbons, naphthalic hydrocarbons, oils, spirits and mixtures thereof.*

*Some illustrative examples of preferred oils and hydrophobic organic compounds that can be employed in the present invention include:*

*KEMESTER.RTM. 5822 (isocetyl stearate), FINSOLVE.RTM. TN (C.sub.12-15 alkylbenzoate), STARFOL.RTM. OS (octyldodecyl stearate), Cochin oil, mineral oil, VARONIC.RTM. APM (PPG-3 myristyl ether), VARONIC.RTM. APS (PPG-11 stearyl ether), isopropyl palmitate and other like fatty acid esters, Klearol (light mineral oil), C.sub.14-C.sub.17 n-paraf fins (light mineral oil), Kaydol (medium weight mineral oil), C.sub.18-C.sub.20 n-paraf fins (medium mineral oil), C.sub.20-C.sub.24 branched paraffins (heavy mineral oil) and Witco Carnation Oil (heavy mineral oil), palm oil, avocado oil and other like natural whole oils such as TEA tree oil, for example.*

*Dispersants that are employed in the present invention include any compound which is capable of preventing the oil or hydrophobic organic*

*compound from coalescing into particle sizes that are larger than the wavelength of visible light. That is, the dispersant employed in the present invention does not permit the formation of a microemulsion in which the average particle size is above 100 nm. Instead, the dispersant employed in the present invention provides the coalescence of particle sizes that are less than the visible wavelength of light.*

*Suitable dispersants that can be employed in the present invention include, but are not limited to: hydroxypivalyl hydroxypivalate and its alkoxyated (1 EO) derivative, TMPD (trimethyl-1,3-pentanediol), TMPD ethoxylate (1 EO), 1,2 cyclohexanedimethanol, 1,4-cyclohexanedimethanol, isopentyldiol, 1,2-hexanediol, hexylene glycol, propylene glycol, isoprene glycol, sorbitan ethoxylates, 2-butoxyethanol, C.sub.6-C.sub.12 diols/triols and ester diols/triols and their alkoxyated derivatives, glycol ethers, and any mixtures and combinations thereof. It should be noted that propoxylated ethoxylated alcohols such as PPG-3-isosteareth-9 (ADGEN.RTM. 66 PE-12) and ethoxylated alcohols such as C.sub.11-5 Pareth-12 (TERGITOL.RTM. 15-S-12 surfactant) may also be employed as long as the same are used in conjunction with one of the above-identified dispersants.*

*Of the above mentioned dispersants, TMPD ethoxylate (1 EO), 1,2-hexanediol, hexylene glycol, propylene glycol and a mixture of hexylene*

*glycol and a propoxylated ethoxylated alcohol, such as PPG-2-isosteareth (ADOGEN.RTM. 66 PE-12), are particularly preferred.*

*The weight ratio of component (a) to component (b) to compound (c) in the microemulsion of the present invention is from about 2:0.5:0.4 to about 0.5:2:0.8. More preferably, the weight ratio of component (a) to component (b) to compound (c) in the microemulsion is from about 0.8:1.2:0.4 to about 1.2:0.8:0.75. Most preferably the weight ratio of component (a) to component (b) to compound (c) in the microemulsion is from about 0.9:1.1:0.5 to about 1.1:0.9:0.6.*

*The microemulsion of the present invention is prepared by adding the above mentioned three components into a suitable reaction vessel containing at least a mixing means and then emulsifying the components under conditions that are capable of forming a microemulsion which have the properties mentioned above. That is, the emulsifying step is capable of forming a microemulsion in which the resultant emulsion is clear and has average particle sizes that are less than the wavelength of light, i.e., less than 100 nm.*

*The three components may be added in any order, using conventional processes well known to those skilled in the art. The microemulsion may be produced at room temperature or elevated temperatures up to 90.degree. C.*



*can be employed. The microemulsions of the present invention may be made by hand stirring or, if needed, by using a mechanical mixer.*

*The resultant microemulsion can also be diluted with water (50 weight % or more) to obtain a clear, dilutable microemulsion. Specifically, when a clear, diluted microemulsion is desired, from about 52 to about 98 weight % of water can be added to the microemulsion. More specifically, when a diluted microemulsion is desired from about 75 to about 95 weight % water can be employed, with a range of from about 80 to about 92 weight % being most highly preferred. The amount of water employed does not affect the weight ratio of components (a)-(c) present in the microemulsion."*

On page 16, Dalrymple et al. teach, a concentrate formula of VARISOFT 432 PPG (dicetyldimonium chloride-a cationic surfactant as presently claimed) 18%, KEMESTER 5822 (isocetyl sterate-a fatty compound as presently claimed) 18%, TMPD-1EO (trimethyl-1,3-pentanediol ethoxylate-a non-ionic surfactant as presently claimed) 12%, hexylene glycol (a non-ionic surfactant as presently claimed) 2%, and water 50%.

Dalrymple et al. does not teach, in one example, a method of making a composition that discloses all of the claimed embodiments. Dalrymple et al. does disclose embodiments that are equivalent and methods of making those embodiments that are equivalent to the presently claimed method of making.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the compounds and methods disclosed in Dalrymple et al. were equivalent to the presently claimed compounds. Dalrymple et al. teach, a microemulsion wherein the composition of said microemulsion comprises a cationic surfactant equivalent to that currently claimed; a fatty component equivalent to the at least one fatty compound as currently claimed; and a non-ionic surfactant equivalent to the at least one non-ionic surfactant as currently claimed. The ratios as disclosed in Dalrymple et al. of component a to b to c fall in the ranges as currently claimed for the weight ratio  $\tau$  as claimed. The temperature ranges for mixing the components disclosed in Dalrymple et al. are up to 90°C, within the range of the mixing temperature currently claimed.

Dalrymple et al. does not explicitly teach lowering the temperature of the solution to 20°C before addition of the cationic surfactant. It is not clear that this step results in a materially different compound than that disclosed by Dalrymple et al. and thus does not provide patentable weight for the presently claimed method.

"Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

The examiner respectfully points out the following from MPEP 2144.05: "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to

discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); see also *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382 ("The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages."); *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969); *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056 (Fed.Cir. 1990); and *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard M. Williams whose telephone number is 571-272-0685. The examiner can normally be reached on MF 9-5:30.

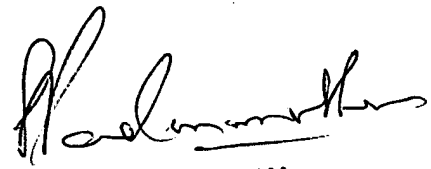
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LMW



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